MULTIMEDIA SCHEDULER

ABSTRACT

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A song and ad scheduler supporting clip-based and stream-based scheduling of multimedia items generates several hours of schedule in advance. Having multiple channel capability, the scheduler uses as inputs: the channel, associated playlists associated, rotation pattern for the channel, and associated programming rules to

10 produce a schedule of multimedia items for the channel. Initially, the scheduler produces a schedule for each channel of predetermined length; then it periodically revisits the channel to add more songs, keeping the schedule to the desired length. Length of the initial playlist is configurable. The scheduler uses a producer-consumer model for distributing work. Producer threads periodically scan the system for work to

15 be done. When a producer thread encounters work to be done, *e.g.* adding to the schedule of a channel, the producer thread places a work request into a queue. Worker threads consume the work requests by fulfilling the requested work.

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